

Metadata for Florissant Fossil Beds National Monument, Field Plots Data Base for Vegetation Mapping

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Geological Survey Department of the Interior

Publication_Date: 200212

Title: Florissant Fossil Beds National Monument, Field Plots Data Base for Vegetation Mapping

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Florissant Fossil Beds National Monument

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other_Citation_Details: Created in part by e2m under contract from NPS.

Online_Linkage: <http://biology.usgs.gov/npsveg/flfo/fielddata.html>

Description:

Abstract: Vegetation field plots at Florissant Fossil Beds NM were visited, described, and documented in a digital database. The database consists of 2 parts - (1) Physical Descriptive Data, (2) Species Listings, and strata descriptive Data.

Purpose: Provide National Parks with the necessary tools to effectively manage their natural resources. Plot data are collected and analyzed to develop a classification (using the Standardized National Vegetation Classification System) and description of vegetation types in preparation for photointerpretation and mapping of the monument's vegetation types.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 200107

Ending_Date: 200108

Currentness_Reference: Ground Condition

Status:

Progress: Complete

Maintenance_and_Update_Frequency: none planned

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -105.311935

East_Bounding_Coordinate: -105.245676

North_Bounding_Coordinate: 38.941112

South_Bounding_Coordinate: 38.884081

Description_of_Geographic_Extent: Florissant Fossil Beds National Monument

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: National Park Service

Theme_Keyword: U.S. Geological Survey

Theme_Keyword: vegetation classification

Theme_Keyword: sampling plots

Theme_Keyword: alliance

Theme_Keyword: association

Place:

Place_Keyword_Thesaurus: None

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Place_Keyword: Colorado
Place_Keyword: CO
Place_Keyword: Florissant
Place_Keyword: Teller County
Place_Keyword: Florissant Fossil Beds National Monument

Access_Constraints: None

Use_Constraints: Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analyses. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations or credit should be given to the U.S. Geological Survey and the National Park Service.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Organization:

USGS Biological Resources Division, Center for Biological Informatics

Contact_Address:

Address_Type: Physical Address

Address: USGS

Address: Biological Resources Division, CBI

Address: Building 810, Room 8000

City: Denver

State_or_Province: Colorado

Postal_Code: 80225-0046

Country: USA

Contact_Address:

Address_Type: Mailing Address

Address: USGS

Address: Biological Resources Division, CBI

Address: PO BOX 25046, DFC, MS302

City: Denver

State_or_Province: Colorado

Postal_Code: 80225-0046

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: 303-202-4229

Contact_Facsimile_Telephone: 303-202-4219 (org)

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Data_Set_Credit: Jim von Loh, in cooperation with NatureServe, collected field data.

Native_Data_Set_Environment: Microsoft Excel

Cross_Reference:

Citation_Information:

Originator: U.S. Geological Survey, Department of the Interior

Publication_Date: 200212

Title: Florissant Fossil Beds National Monument, Spatial Vegetation Data: Cover type / Association Level of the National Vegetation Classification System Base for Vegetation Mapping

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Florissant Fossil Bed National Monument

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other_Citation_Details: Created in large part by USGS Rocky Mountain Mapping Center under agreement from the National Park Service

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Online_Linkage: <http://biology.usgs.gov/npsveg/flfo/index.html>

Cross_Reference:

Citation_Information:

Originator: U.S. Geological Survey, Department of the Interior

Publication_Date: 200212

Title: Florissant Fossil Beds National Monument, Accuracy Assessment

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Florissant Fossil Beds National Monument

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other_Citation_Details: Created in large part by e2m and USGS RMMC under contract with the National Park Service

Online_Linkage: <http://biology.usgs.gov/npsveg/flfo/index.html>

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None

Taxonomic_Keywords: vegetation classification

Taxonomic_Keywords: Standardized National Vegetation Classification System

Taxonomic_Keywords: alliance

Taxonomic_Keywords: community association

Taxonomic_System:

Classification_System/Authority:

Classification_System_Citation:

Citation_Information:

Originator: U.S. Government; Federal Geographic Data Committee

Publication_Date: 19971022

Title: National Vegetation Classification Standard (NVCS)

Geospatial_Data_Presentation_Form: document

Publication_Information:

Publication_Place: Washington D.C.

Publisher: Federal Geographic Data Committee

Online_Linkage: http://www.fgdc.gov/standards/status/sub2_1.html

Taxonomic_Procedures: Vegetation associations were identified; no specimens nor vouchers were collected as a part of this process.

Taxonomic_Completeness: Conforms with FGDC standardized vegetation classification system.

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom

Taxon_Rank_Value: Plantae

Applicable_Common_Name: plants

Browse_Graphic:

Browse_Graphic_File_Name: <<http://biology.usgs.gov/npsveg/flfo/images/flfoplot.jpg>>

Browse_Graphic_File_Description: Locations of vegetation plot samples; low resolution for web browsing.

Browse_Graphic_File_Type: JPG

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

Physical description - Descriptive plot data were collected for 99 sites and 60 observation points whose vegetation represents a full spectrum of alliance types present within Florissant Fossil Beds National Monument. Attributes collected for each site include: a unique plot identification code, park

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name, quad name, UTM coordinates, UTM projection, plot survey date, surveyor's name, length, width, photo type, elevation, slope aspect, topographic position, landform, surface geology, Cowardin System category, hydrology, surface material description, soil texture, soil drainage, leaf phenology, leaf type, and physiognomy. Species - Descriptive plot data were collected for 99 sites whose vegetation represents a full spectrum of alliance types present within Florissant Fossil Beds National Monument.

This database, which is the second of two databases containing plot field data, delineates species. Individual species described at each of 99 plots is listed, one line per species, with the following information: Plot Identification Code, Numeric Species Code, Species Name, Species Cover (0=trace, 1=< 1%, 2=1-5%, 3=5-25%, 4=25-50%, 5=50-75%, 6=75-100%), Plantcode, and Strata Code (T1=emergent, T2=canopy, T3=sub-canopy, S1=tall shrub, S2=short shrub, H=herbaceous, N=non-vascular, V=vinae/liana, E=epiphyte).

Most of the 99 plots have multiple strata, with each listed as a separate line entry in the species database. Strata are described by plot code, descriptive name, height, cover, and an alpha-numeric strata code.

Descriptive names include canopy, sub-canopy, tall shrub, short shrub, herbaceous, and emergent. Height classes, in meters, range from 1 to 7: 1=<0.5 m, 2=0.5-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m and 7=15-20m. Cover groupings, in percent, range from 1 to 4: 1=0-10%, 2=10-25%, 3=25-60%, and 4=60-100%.

The diagnostic species for each stratum is listed by latin name. Stratum codes are defined in the following manner: T1=emergent, T2=canopy, T3=sub-canopy, S1=tall shrub, S2=short shrub, and H=herbaceous. Less extensive data were collected at the 60 observation points in two tables.

Logical_Consistency_Report:

Physical description - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors. Species & Strata - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors, as defined above under "Attribute Accuracy Report".

Completeness_Report:

Physical description - Descriptive entries for each of the 99 plots and 60 observation points are complete for each of the applicable attributes listed in the database. Species - One species is entered per line, by plot code, with multiple species listed for each plot, one per row. Plot codes and species names are complete for each row, but some species codes,

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cover and strata information is missing (because it was not present on the original field forms).

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report: X,Y UTM coordinates representing each of the 99 plots were collected via GPS under selective availability with post processing for differential correction. The differentially corrected GPS coordinates have accuracies in the X and Y direction of +/- 2 to 5 meters.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report: Elevations for plots were obtained from the USGS 24,000 quad map for Lake George, and are estimated to be +/- 15 m.

Lineage:

Methodology:

Methodology_Type: Field

Methodology_Identifier:

Methodology_Keyword_Thesaurus: None

Methodology_Keyword: releve

Methodology_Keyword: plot

Methodology_Keyword: sampling

Methodology_Description: Field sampling using releve plots

Methodology:

Methodology_Type: Field

Methodology_Description: Field Methods for Vegetation Mapping

Source_Information:

Source_Citation:

Citation_Information:

Originator: National Biological Survey (Now USGS/Biological Resources Division)

Originator: and National Park Service

Publication_Date: 199411

Title: Standardized National Vegetation Classification System; protocol document for the USGS-NPS Vegetation mapping Program

Geospatial_Data_Presentation_Form: document

Edition: Final Draft

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Protocol documents

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics

Other_Citation_Details: Report prepared under contract by The Nature Conservancy, 1815 N. Lynn Street, Arlington, Virginia 22209 and Environmental Systems Research Institute, 380 New York Street, Redlands, California 92373

Online_Linkage: <http://biology.usgs.gov/npsveg/classification/index.html>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199411

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: SNVCS protocol document

Source_Contribution: This document describes and defines the vegetation classification system which is to be used for describing and mapping the vegetation at Florissant Fossil Beds National Monument

Source_Information:

Source_Citation:

Citation_Information:

Originator: USGSBRD, Center for Biological Informatics

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Publication_Date: 19980223
Title: Vegetation Mapping Project Report at Florissant Fossil Beds National Monument
Geospatial_Data_Presentation_Form: report
Series_Information:
 Series_Name: USGS-NPS Vegetation Mapping Program
 Issue_Identification: Florissant Fossil Beds National Monument
Publication_Information:
 Publication_Place: Denver, CO
 Publisher: USGS/BRD, Center for Biological Informatics
 Other_Citation_Details: This report was generated by e2m, NatureServe and the USGS Rocky Mountain Mapping Center under contract with the National Park Service
 Online_Linkage: <http://biology.usgs.gov/npsveg/flfo/index.html>
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 200106
 Ending_Date: 200207
 Source_Currentness_Reference: Ground Condition, summer 2001
Source_Citation_Abbreviation: FLFO sample and classification
Source_Contribution: Report summarizing plot data collection effort
Source_Information:
Source_Citation:
Citation_Information:
 Originator: United States Dept. of the Interior, National Biological Survey (now USGS Biological Resources Division) and the National Park Service
 Publication_Date: 199412
 Title: Field Methods for Vegetation Mapping
 Geospatial_Data_Presentation_Form: document
 Publication_Information:
 Publication_Place: Denver, CO
 Publisher: USGS/Biological Resources Division, Center for Biological Informatics
 Other_Citation_Details: This report was generated by The Nature Conservancy under contract to the USGS/BRD, CBI
 Online_Linkage: <http://biology.usgs.gov/npsveg/fieldmethods/index.html>
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 199412
 Ending_Date: 2010
 Source_Currentness_Reference: Publication Date and indefinitely
Source_Citation_Abbreviation: field methods protocol document
Source_Contribution: This document defines the methods and protocols for field data collection to be used as part of the USGS-NPS Vegetation Mapping Program
Process_Step:
Process_Description:
 The following describes the tasks performed by The Nature Conservancy to produce descriptive data for 99 vegetation sampling plots in two separate database files and 60 observation points. The first contains general descriptive information at each of the plots. Plot sites were selected by information obtained during a reconnaissance visit to the park in June of 2001, and by examining tone and textural patterns on the FLFO

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AERIAL PHOTOGRAPHS. Site physical parameters, species types, and vegetation strata were described at each site. The PLOTS database contains tabulations of site physical factors, listed under the ATTRIBUTE ACCURACY REPORT for each of the 99 plots. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the Project Report.

Process_Date: 200107

Process_Step:

Process_Description:

The following describes the tasks performed by The Nature Conservancy to produce descriptive data for 99 vegetation sampling plots in three separate database files. The second table contains listings of individual species found in each plot, along with height and cover estimates, and strata delineations. The SPECIES LISTING database contains line entries for each species including the Plot Code, Numeric species code, full scientific species name, cover estimate, a unique alphanumeric species identifier (plant code), and Plant Strata delineation. Plot sites were selected subjectively because of the heterogeneity of the vegetation and the small number of samples per type. Since aerial photos were not available at the time of plot selection, visual reconnaissance was conducted at the summit of the bluff to examine vegetation patterns for the purpose of plot placement. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the Project Report.

Process_Date: 200107

Source_Used_Citation_Abbreviation: SNVCS protocol document

Source_Used_Citation_Abbreviation: Field Methods for Vegetation Mapping

Source_Produced_Citation_Abbreviation: flfo sample and classification

Source_Produced_Citation_Abbreviation: flfo Vegetation Descriptions

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jim Von Loh

Contact_Organization: e2m

Contact_Position: Senior Biologist

Contact_Address:

Address_Type: Physical Address

Address: 7000 South Yosemite Street

Address: Suite 295

City: Engelwood

State_or_Province: CO

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Postal_Code: 80112
Country: USA
Contact_Voice_Telephone: (303-721-9219
Contact_Electronic_Mail_Address: jvonloh@e2m.net

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: vector

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 13
Transverse_Mercator:
Longitude_of_Central_Meridian: -105
Latitude_of_Projection_Origin: 0
False_Easting: 500000
False_Northing: 0
Scale_Factor_at_Central_Meridian: .9996
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: Coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 100
Ordinate_Resolution: 100
Planar_Distance_Units: Meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview:
Each of 99 vegetation plots has attributes for physical description, species and strata. Physical description - (Plot number, plot code, common name, scientific name, state, park name, quad name, utm zone, map project, gps file, raw utm x, raw utm y, corrected utm x, corrected utm y, surveyors date, surveyors, length, width, photos, permanent, elevation, slope, aspect, topographical position, landform, surficial geology, cowardin system type, hydrography, bedrock, large rock, small rock, sand, litter duff, wood, bare soil, other soil, soil texture, soil drainage, leaf phenology, leaf type, and physiology). Species - (sp_code is a project specific code for each species found, species is the scientific name for that species, spcover is the species present and the percent cover for each species, plant code is the first two letters of the genus and first two letters of the species. If the code are not unique a number is added to make the code unique). Strata - (height and cover

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are average percent cover of that particular species, 1 = 0-10%, 2 = 10-25%, 3 = 25-60% and 4 = 60-100%, pstrata is the type of vegetation, T1 = emergent, T2 = canopy, T3 = sub-canopy, S1 = tall shrub, S2 = short shrub, H = herbaceous, N = non-vascular, V = vine/liana, and E = epiphyte).

Entity_and_Attribute_Detail_Citation:

Field Methods for Vegetation mapping, December 1994. Prepared for: the United States Department of the Interior, National Biological Survey (now the USGS Biological Resources Division) and the National Park Service. Prepared by: The Nature Conservancy, and Environmental Systems Research Institute.
(<http://biology.usgs.gov/npsveg/fieldmethods/index.html>)

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810,
Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Resource_Description: FLFO Plots Data; Physical Descriptive Data and Species Listing Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the Biological Resources Division, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a Biological Resources Division server, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Biological Resources Division shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

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Format_Name: HTML
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: <http://biology.usgs.gov/npsveg/flfo/fielddata.html>
Fees: None

Metadata_Reference_Information:

Metadata_Date: 20021217

Metadata_Review_Date: 20050519

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological Informatics, MS 302,
Room 8000, Building 810, Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part
1: Biological Data Profile, 1999

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Extensions:

Online_Linkage: <http://biology.usgs.gov/fgdc.bio/bionwext.txt>

Profile_Name: Biological Data Profile FGDC-STD-001.1-1999